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ORIGINAL LECTURES.

CLINICAL LECTURE ON A CASE OF CONGENITAL SYPHILIS.

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(Reported for the Medical Times.)

GENTLEMEN,—I wish to show you to-day this specimen of syphilitic infection during uterine life, and also to say a few words to you in season concerning the danger incurred in delivering a patient suffering from syphilis.

The mother of this dead infant has been in labor eight times, and each labor has been premature. The first four children were born between the fifth and the seventh month, the last four after the seventh month. Four of the children were still-born, and none of the others has lived more than a day or two after birth.

The woman was in labor for the eighth time last week. The case turned out to be one of brow presentation, and I put on the vectis. As soon as the child was born it began to cry in a peculiarly hoarse manner, and in a very short time the characteristic bullæ made their appearance,—first on the feet of the child, then over the rest of its body. I saw at once that the case was hopeless; but, as it is a doctor's duty to save life, I had the child thoroughly anointed with mercury daily: all in vain, however; it was born on Friday, and died on the following Tuesday morning.

The best means of anointing a new-born child with mercury is the following. Tell the nurse to rub the ointment each day well into the belly-band. When one band becomes so covered with the ointment that it begins to get stiff, start with a new one. You will be astonished to see the improvement which will sometimes take place in a week or two in a syphilitic child thus anointed. As a general rule, however, the doom of nature has gone forth, and the poor little things very rarely live more than a few days. They may, perhaps, be almost cured of the eruption, when albuminoid degeneration of the liver or of the spleen, or a cheesy pneumonia, supervenes and carries them untimely off.

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Now, I ran a very considerable risk in attempting to deliver this woman whom I knew to be infected with syphilis, and all of whose previous children had died before or immediately after birth as the result of syphilitic disease during uterine life. I ran a very serious risk of infecting my hand, and so my constitution, with the syphilitic poison. I can relate to you quite a number of cases bearing on this point.

In my medical class was quite a gifted young fellow from New England. He was very well up in his studies, and confident of obtaining a diploma, when, just as he was about to graduate, an eruption appeared upon his face, and the Dean of the Faculty refused to grant him a diploma, recognizing the eruption as that of syphilis. It turned out that the poor fellow had been spending his vacation at Deer Island, near Boston, where there are a great many prostitutes, and had attended several of these women and treated them for syphilis. Upon his return to this city in the autumn he brought back a very troublesome hanging-nail on one of his fingers, which refused to heal in spite of all treatment. He never suspected this to be a chancre until the eruption appeared.

He sent to Deer Island and obtained documents authenticating the facts of the case, and upon the strength of these papers the Faculty determined to grant him his diploma, and upon graduation-day a friend went upon the stage and received it for him. Subsequently he settled in the West, and after a prolonged course of mercury thought that he had wholly got rid of the disease, and married. All the children his wife bore him were rotten with syphilis, and dead-born. On the birth of the fifth child afflicted in the same sad way, the father went into his room, locked the door, and shot himself.

I know of several doctors in this city who were infected with the disease in labor cases. One lost all his hair and beard. Another had a sore on his finger which obstinately refused to heal. He saw several of the best doctors in Philadelphia,—authorities on such matters,—and they could see nothing specific in the sore. I told the doctor that I did not pretend to know anything about syphilis except as it appeared in new-born children, and yet that I felt absolutely certain, from the facts of the case, that what he regarded as a simple sore was in reality a chancre. The man

ridiculed the idea utterly. By and by the sore healed, and the doctor's health grew worse and worse, until finally an eruption broke out on his forehead; then he believed me.

Some years ago I had an obstinate sore of the same kind on my own finger. I went to Prof. Agnew, and he told me it was a chancre, and cauterized it. You may be sure that I was a thoroughly miserable man for some time afterwards; but fortunately it passed away without infecting my constitution.

The tainted liquor amnii of a syphilitic fœtus is abundantly able to inoculate the accoucheur with the poison. If the circumstances are such that you cannot get out of attending such a case, the safest method for you to pursue is to grease your hand and arm well with carbolized oil before touching the parts, then, as soon as the child is delivered, run out and wash them thoroughly with carbolized soap.

Braun, of Vienna, says that in spite of his advice and admonitions a number of his students are infected in just this way every year.

Congenital syphilis may appear either before or after birth. The labor is usually premature, and the first symptom of the disease is the hoarse cry to which the child gives utterance. The bullæ will soon show themselves. The disease in utero takes the form of placentitis, the exudation presses the blood out of the small capillaries and so gradually starves the product of conception; or there may be a gummy tumor or fatty degeneration of the placenta, so causing premature labor. In some cases the labor is precipitated by atheroma of the vessels of the cord.

Why does the child give utterance to a hoarse cry as soon as it is born? Undoubtedly because there are already syphilitic ulcers on the mucous membrane of its throat and air-tubes. Such children are always puny and sickly-looking. The bullæ appear in the course of a few hours after birth, and are first visible on either the scrotum, hands, or feet.

But suppose the child shows none of the signs of syphilis at birth or within the course of a few days: when is the disease most likely to reveal itself if it really exists? It usually begins some time between the second week and third month after birth. How does it begin? The child, though entirely well in other re-

spects, cries a great deal at night. This crying is caused by the incipient bone disease,—pains in the bones. Its cry, too, is muffled and hoarse. A third symptom is the snuffles; the child's nose is all stopped up,—a scalding coryza comes on. Then the child grows wizened and thin, and its skin lies in rolls and wrinkles, more like parchment in consistency than skin. The so-called *copper* maculæ show themselves, or the complexion gradually assumes a coffee-and-milk hue. Then the eruption comes out all over the body, and stamps the case indisputably as one of syphilis.

In some instances it is very hard to find out whether the mother has the disease herself or whether the father has been the only instrument of inoculation. In this connection you will often be able to note the curious fact that an apparently uninfected mother can nurse her syphilitic child with impunity, whereas the child is sure to communicate the disease to a healthy wet-nurse.

Should a syphilitic child be knowingly allowed to draw its sustenance from a wet-nurse, and the nurse be so inoculated, she has just grounds for an action at law against the parents of the child.

As I said above, treatment is generally hopeless. It is a wise law of nature which sentences all such vitiated and diseased products to early death. Of course all the physician can do is to subject the child to a brisk mercurial treatment. In some rare cases you may be able to cure and save such children, but as a general and beneficent rule they die in the course of a few days or few weeks.

ORIGINAL COMMUNICATIONS.

A CASE OF ANEURISM OF THE THORACIC AORTA, WITH UNUSUAL PHYSICAL SIGNS.

BY WILLIAM PEPPER, A.M., M.D.,

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S. **ÆT.** about 38 years, had followed the sea from the age of 16 years. He was admitted to the Pennsylvania Hospital July 28, 1877, suffering with symptoms of bronchitis, which were soon relieved, and he was discharged. He was admitted to the University Hospital on November 12, 1877. He stated that he had enjoyed very good health until July last; and that since his discharge from the Pennsylvania Hospital he had been

able to continue work as a sailor, and to make several voyages. Soon before his admission to the University Hospital he began to complain of cough, hard and dry in character, occasional shortness of breath, and pain in the region of the præcordia. These facts were not elicited until after the appearance of more serious symptoms.

From the 12th to the 17th of November he was about the wards, and seemed not to have much the matter with him. He was a well-built, stout man, of sallow complexion; and, as he had been recently in malarial districts and as there was slight irregular febrile action, he was ordered full doses of quinine, and careful thermometric observations were made to determine the character of the febrile movement. On the 17th, however, he called attention to the increasing shortness of breath, and a careful examination of the thorax was made for the first time.

There was impaired respiratory movement of the left chest. On the right side the movement was marked; resonance was normal and the respiratory murmur was exaggerated. At the extreme right apex there were mucous râles over a very small area, and expiration over the same area was blowing and prolonged. On the left side there was absolute flatness on percussion in front, from the clavicle down to the third interspace where it was continuous with the cardiac dulness; laterally, there was vesiculo-tympanitic resonance from the anterior to the posterior borders of the axilla; posteriorly, there was marked dulness over the scapular region, while inferiorly there was resonance but slightly impaired. These relations were not influenced by alterations of position of the patient's body. Inspection showed a distended vein which came from the left axillary region, crossing the pectoral region to reach the mammary vein.

On auscultation, over the area of flatness anteriorly there was entire absence of respiratory sound, with almost complete absence of vocal resonance and fremitus; posteriorly over the upper lobe there was feeble blowing

breathing; laterally there was rather feeble vesicular murmur, and postero-inferiorly there was feeble vesicular murmur with scattered crackling râles. There was no aneurismal murmur heard over the area of dulness, nor posteriorly to the left of the vertebral column.

The area of cardiac dulness was increased, and the apex-beat was in the fifth interspace, one inch outside of the line of the left nipple. There was neither thrill, friction-sound, nor murmur, the sounds being merely distant and feeble. There was reduplication of the second sound, as heard over the body of the heart.

During the next two days the patient's condition was unchanged. On the 20th, after a quiet night, he had a slight attack of hæmoptysis, which ceased soon after large doses of gallic acid had been given. The countenance now expressed anxiety, and the alæ of the nose moved strongly in respiration. Inspiration was especially labored. The pulse was 96. The temperature rose during the day to 100° F. The following day there was a slight hæmoptysis early in the morning, and the symptoms were all aggravated. On the morning of the 22d, after a spell of coughing, there was another attack of hæmoptysis. He did not complain of pain, but of general soreness over the left chest. The dyspnoea was greatly increased, and the pulse was more frequent, and weaker. The temperature rose to 103°. Cough was frequent and smothered, with bloody sputa. The dulness on the left side had now extended over the whole pulmonary area; and over the lateral and postero-inferior parts of this side there was obscure bronchial breathing with some coarse crackling râles. For the first time there was an indistinct sense of pulsation in the second left interspace, about an inch from the sternum. On the morning of the 23d there was still another attack of hæmoptysis, of greater quantity than before. The pulse was rapid and small. The temperature rose to 104°. There was orthopnoea, which steadily increased with continued hæmoptysis, and death occurred on the morning of November 24.

Temperature.

DATE.	97°	98°	99°	100°	101°	102°	103°	104°
November 18.....								
" 19.....								
" 20.....								
" 21.....								
" 22.....								
" 23.....								
" 24.....								

The treatment consisted in the free administration of opium, digitalis, and quinia, with gallic acid and ergot to arrest the hemorrhage.

The post-mortem examination was made twenty-four hours after death. The sternum was removed, and the thoracic organs were examined first *in situ*. The pericardial sac was decidedly enlarged. The right lung was somewhat emphysematous, chiefly along the anterior margin; the upper lobe was partially collapsed. The upper lobe of the left lung came forward as far as during moderate inspiration, while the lower lobe was somewhat pushed backwards by the distended pericardium. On cutting open the pericardium there were thick shaggy layers of lymph over both surfaces of the pericardium, with about half a pint of turbid serum in the pericardial sac. The heart was moderately enlarged, its apex corresponding to the point where impulse was noted during life.

The right lung presented at its apex a cluster (three or four) of round cheesy nodules, encapsuled by fibrous tissue, and only softened in points; otherwise its tissue was healthy.

The upper lobe of the left lung presented a curious combination of several large peripheral hemorrhagic infarctions, with complete collapse, of long standing, of the remainder of its tissue. These latter parts were tough and leathery. The posterior part of the upper lobe was not so completely collapsed as the anterior.

The lower lobe presented externally a mottled appearance, patches of purplish black being thickly scattered over the surface. On section it seemed uniformly consolidated. Any portion of it sank immediately in water. The tissue, as seen in section, was red, resembling closely a blood-clot; it was too friable, and in places was slightly granular.

On raising the upper lobe of the left lung, and carefully tracing upwards the arch of the aorta, it was found normal till after the great vessels had been given off. At the beginning of the descending thoracic aorta it expanded into an irregularly spherical tumor, which had hollowed out for itself a space in the tissues of the central part of the left lung. This aneurismal sac, which was about two and a half inches in diameter, pressed on the trachea to some extent, but it had pressed so strongly on the left primary bronchus as to have caused gangrenous ulceration, which had finally entirely severed the bronchus. At this point of pressure the aneurismal sac had given way, so that the blood had escaped partly into the left bronchus, which was filled with soft clots, and partly into the tissue of the root of the lung. There was only a slight degree of atheroma of the aorta either above or below the seat of the aneurism. The œsophagus was compressed in a slight degree by the aneurismal tumor.* There were no mor-

bid changes found in any of the abdominal organs.

REMARKS.—The above case presents various points of interest, of which the most important concerns the diagnosis. Owing to the entire want of history of previous symptoms, and of any complaint referring to the chest, no careful physical examination was made for several days. The results then obtained were certainly somewhat puzzling. The entire flatness over the upper lobe of the left lung anteriorly, associated with absence of breath-sounds, and with great feebleness of vocal fremitus and resonance, suggested the possibility of a circumscribed pleuritic effusion. The general symptoms at first were not opposed to such a view. But, in the first place, it is almost inconceivably rare for a localized pleurisy, with encysted effusion, to occur at the apex. Again, it could hardly be supposed, in the event of such a rare occurrence, that the fluid would be in such quantity as to prevent the transmission of some bronchial breathing from the trachea or primary bronchus. Nor would we expect to find the upper lobe of the lung compressed so forcibly backwards that there should be no vesicular murmur audible over its posterior surface. The marked distention of one of the cutaneous veins was also opposed to this view. Finally, the appearance of hæmoptysis would have been very difficult to explain on this supposition.

Still more was it impossible to consider the symptoms as due to plastic pleurisy limited to the upper lobe of the left lung.

There is, however, one form of circumscribed collection of fluid in the chest which gives rise to physical signs that might be confounded with those in the present case. I refer to hydatid cysts in the lungs. The favorite seat of these formations is near the apex, where, as they develop, they push back the lung and give rise to absolute dulness on percussion, impairment or absence of vocal fremitus, and entire absence of respiratory murmur. In addition to this there may follow, if the pressure on the lung-tissue is rapidly developed or reaches a high degree, pneumonia or gangrene of the lung, with bloody sputa. These remarkable physical

time on the day after his death. She then stated that for some time there had been more or less difficulty in swallowing solid food, and also some hoarseness of voice. These symptoms were not mentioned by the patient himself during the time he was under observation.

* The wife of the patient came to the hospital for the first

signs, which are stated by Bird,* who has had unparalleled opportunities of studying this affection in Victoria, where it is endemic, to be of frequent occurrence, present many points of resemblance to those in the case of S. Apart from the extreme rarity of hydatid disease of the lung in this country, the following important diagnostic points were noted:

Bird says that the area of dulness due to a hydatid cyst always presents a sharply-defined rounded outline, whereas in the case here reported the dulness corresponded more closely with the area of the upper lobe of the left lung. Again, the amount of irritation of the surrounding lung-tissue, the degree of febrile action, and the frequency and profuseness of the hæmoptysis, were much greater than is usual in cases of hydatid cyst. It must be admitted, however, that it would have been possible for such a cyst, which had developed rapidly and had caused such intense pressure on the main bronchus and surrounding lung-tissue as to induce pneumonia and gangrene, to give rise to all the symptoms and signs which were here present. It was therefore chiefly in consequence of the great rarity of such a growth in this climate that its existence was negatived and the idea of an aneurism entertained.

On the other hand, it was necessary to exclude carefully the existence of consolidation of the upper lobe of the left lung. Simple pneumonic consolidation was excluded by the seat of the lesion and the mode of development of the disease, no less than by the peculiar physical signs. But it was not so easy to decide that there was not tuberculous infiltration of the upper lobe with obstruction of the main bronchus by a firm clot or by pressure of enlarged bronchial glands. In favor of this view were the history, which, though vague and imperfect, pointed to continuous cough and expectoration, the evidences of circumscribed cheesy formations at the right apex, the irregular hectic fever, the hæmoptysis, and the dulness on percussion over the left upper lobe. But it was evident that if there was pulmonary consolidation there must also be complete obstruction of the bronchus leading to the upper lobe, so as to explain the absence of all respiratory sounds, and of vocal fremitus

and resonance. It was extremely improbable that enlargement of a bronchial gland should exist to such an extent as entirely to occlude this bronchus. It was evident that the hemorrhages came from the left lung, and, although it was not actually impossible that the bronchus leading to the upper lobe should be obstructed by a firm clot, while hemorrhage continued to occur from the lower lobe, it was very unlikely. But, moreover, such consolidation of the upper lobe would not have accounted for the presence of the distended cutaneous vein which has been described, nor for the displacement of the heart downwards and to the left.

A careful review of the arguments for and against the various conditions I have named led to the conclusion that the physical signs were due to collapse of the upper lobe of the left lung from occlusion of its main bronchus by the pressure of an intrathoracic tumor. The existence of a hydatid cyst being further excluded, it seemed probable that the tumor was aneurismal rather than solid in character. Had it been of this latter character, the existence of localized disease at the right apex would have rendered its cancerous nature probable. But there was no external primary growth; there was no cachexia nor emaciation; the age of the patient was opposed to such a view; and, finally, the repeated copious hemorrhages and the rapid development of the pulmonary lesions were also opposed to it. The indistinct pulsation in the second left intercostal space which appeared only on the day before death might have been expected on either supposition, as a solid growth lying in contact with the arch of the aorta might readily have a pulsation communicated to its mass. The diagnosis that was formulated during life was, therefore, that there was an aneurism of the descending thoracic aorta, entirely covered by the upper lobe of the left lung; that it had occluded by its pressure the bronchus leading to the upper lobe of that lung; that an ulcerated or gangrenous opening was forming between the aneurism and the bronchus; that there were small cheesy formations at the right apex. It will be seen that the post-mortem examination confirmed this view; and incidentally it has been shown how this condition accounted for the very unusual symptoms and physical signs that were present. The existence of pericarditis was sus-

* On Hydatids of the Lung. By J. Duncan Bird, M.D. Melbourne, 1877.

pected during life; but the absence of friction-sounds, the position of the apex-beat, and the impossibility of determining satisfactorily the boundaries of cardiac dulness, made it difficult to decide upon. I would ask attention to the reduplication of the second sound, which is a more frequent sign of pericardial exudation and adhesions than is usually recognized.

There is nothing positive known as to the cause. The patient's occupation, the absence of any history of injury, the old cheesy nodules at the right apex, the patches of endarteritis on the aorta, all confirm the suspicion that it may have been connected with constitutional syphilis.

The case also presents considerable interest from a pathologico-anatomical point of view. The position of the aneurism, flattening out the upper lobe and entirely concealed by it, the gangrenous destruction of the bronchial tube, and the combination of complete collapse of the upper lobe of the lung with several large hemorrhagic infarctions, may be specially noted. But still more interesting was the condition of the lower lobe, which presented complete consolidation, due to coagulation of blood in its vesicles and minute bronchioles. This lesion was marked during life by such rapidly developing physical signs, and there were at the same time such marked febrile symptoms and progressive rise in temperature, instead of the more usual symptoms of extensive hemorrhage, that the comparatively small amount of pneumonia is specially instructive.

TWO CASES OF INTRA-UTERINE, SUBMUCOUS, FIBROID TUMOR SUCCESSFULLY TREATED BY THE USE OF ERGOT.

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THIS brief contribution to the therapeutical treatment of intra-uterine fibroid tumors is made, chiefly, for the encouragement of those who might hesitate in its employment, under the apprehension that it involves much greater danger to life than the surgical treatment. I have no statistics at my command showing the relative success of the two methods of treatment, and consequently cannot express a decisive opinion on the subject. In the absence of statistical evidence to the contrary, and judging from the num-

ber of cases reported by European and American practitioners as successfully treated, I assume that the therapeutical treatment by means of ergot, either hypodermically or by mouth, is as successful as the surgical treatment, and hence worthy of trial in all suitable cases by practitioners who are unskilled in surgical methods. My own experience is limited to two cases, and these were by no means favorable ones to begin with. Both of them had been greatly reduced by profuse and prolonged menorrhagia during a period of five years, having been usually confined to the recumbent position two out of every four weeks from this cause. One of them had been confined to her bed with chronic diarrhoea and oedema of the lower extremities nearly three months immediately preceding the treatment. Both of them being in this enfeebled condition for so long a time were certainly not the most favorable cases to be subjected to a treatment which, by eminent authorities, is regarded as perilous from the probable occurrence of septicæmia. But as no alarming symptoms were developed during the treatment of these cases, so apparently unpromising, the presumption is that with judicious management and under favorable circumstances the large majority of them could be successfully treated. I do not wish to be understood as saying that this method of treatment is preferable to the surgical. The latter has many advantages. The former is slow, tedious, painful, and offensive to both patient and physician. Not so the surgical. But many country practitioners who have a natural repugnance to surgical methods of treatment may encounter cases which demand prompt attention, and in which the treatment by ergot would be preferred by the patient. To such, at least, it is hoped, this article will be acceptable as well as useful.

Case I.—Mrs. S., æt. 43, had been suffering from a profuse and exhausting menorrhagia for five years. Her trouble began after the birth of her first and only child. No examination had ever been made with the view of ascertaining the existence of any morbid growth before consulting me, although she labored under the apprehension that such growth existed. In June, 1875, she placed herself under my care. Abdominal palpation alone was sufficient to disclose the existence of a tumor of some kind, as it was easily recognizable through the abdominal walls, and this conjoined with the vaginal touch proved

it to be intra-uterine; but a more thorough exploration of the cavity of the uterus was necessary to demonstrate its true nature. Consequently, having previously dilated the cervical canal with sponge tents I was enabled to diagnose a fibroid tumor, as well as the situation and extent of its attachment. The tumor proved to be the size of the foetal head, with a broad attachment to the fundus and left side of the uterus. Satisfied from my exploration that I had a submucous fibroid tumor to deal with, I at once resolved to attempt its destruction with ergotin. Without entering into tedious details, suffice it to say that I began to administer the ergotin in five-grain doses hypodermically, part of the time daily, and part of the time on alternate days, according to the effect produced, for a period of three weeks. The action of the ergotin was prompt and decided, producing severe and prolonged uterine contractions, as evidenced by the severe pain, and hardening and consolidation of its tissue, perceptible through the abdominal walls. The pain was often so severe as to require the administration of an opiate, and continued several hours. Indeed, the process set up in the uterus was, to all intents and purposes, similar to labor,—a protracted labor of three weeks' continuance,—with intervals of rest after the action of the ergotin was expended. After the ergotin had been used for probably a week or more, its action appeared to be continuous, the uterus remaining firmly contracted without any marked relaxation. At the end of three weeks my patient, who had been having for several days a very offensive vaginal discharge, called my attention to something protruding from the external genitals. On making an examination I unexpectedly, and to my great gratification, detected a fragment of the tumor, half the size of a fist, sloughing away, which I removed with my hand. Another portion was still protruding from the os uteri. It was evident now that the tumor was sloughing. Several days after, another fragment was removed, and at the expiration of another week the remaining portion, the size of an orange, was expelled into the vagina with its attachment to the uterine walls still firm. Satisfied from the solidity of this remaining portion that the sloughing process had ceased, I applied a ligature by means of a Gooch's double canula, which being tightened daily for a few days, the tumor dropped off, which I then removed from the vagina by means of a polypus forceps. No untoward symptoms followed.

Case II.—Mrs. B., æt. 37, the mother of three children, consulted me in May, 1876. Her condition differed very little from that of Mrs. S. No difficulty was encountered in making up a diagnosis. The tumor was the same size, and its attachment about as extensive. As she dreaded the hypodermic syringe, I concluded to try the effects of the fluid ex-

tract of ergot by mouth, in one-ounce doses daily. Its action was as prompt and decided as in the preceding case. At the end of three weeks the sloughing process was fairly established, but was much more decided and complete than in the other case. On examination I found a portion protruding from the os uteri, which I removed. In a few days more, under the continued use of the ergot, the entire mass was extruded from the uterus into the vagina. This I enucleated without any difficulty, and without the least hemorrhage, from its attachment, with my finger-nails, and thus completed its removal.

These two cases, yielding so promptly, and having been attended with so little disturbance to the constitution, embolden me to promise like favorable results to others who may be disposed to adopt the therapeutic treatment.

But it must not be forgotten that we are admonished by authors whose opinions are not to be disregarded that no little danger attends this method of treatment. Septicæmia is regarded as almost certain to occur; and certainly the presence of so large a sloughing mass in the cavity of the uterus should be a sufficient cause for apprehension of serious, if not fatal, consequences, from the absorption of septic material. Still, is it not possible that the dangers from this source have been greatly exaggerated? In *puerperal* cases, where traumatic lesions exist, a woman could scarcely be expected to escape serious blood-contamination from the decomposition of coagula of blood or portions of placenta retained in the uterus, and it is possible that septicæmia only does supervene in cases in which such lesions exist. The *puerperal* woman, and the woman with a sloughing tumor, are not parallel cases. In the former, traumatic lesions do exist, the internal surface of the womb being regarded after the detachment of the placenta as a vast wounded surface. Nothing of the kind necessarily accompanies the sloughing of a tumor. The latter process is more like that of mortification, in which nature takes the precaution to close up the blood-vessels of the living textures by the exudation of plastic material, and thus prevents the absorption of putrescent substances. Furthermore, it is not yet absolutely demonstrated that absorption of septic material does take place from a mucous surface in a state of integrity. Then, again, is it not possible that the ergot, which is known to produce

such complete contraction of the capillary blood-vessels as to arrest hemorrhage, would not also arrest absorption? Along with the condensation of the uterine tissue produced by the action of the ergot there will be a temporary obliteration of its capillaries, and as a consequence it may be presumed that the process of absorption will be materially impaired, if not wholly arrested. As some high authorities maintain that traumatism is essential to the absorption of septic material, we may not be far wrong in associating traumatism and septicæmia as cause and effect. As a matter of course, in hospital practice, where patients are constantly liable to exposure to toxic influences, the danger would be imminent; but the risks incurred in country practice, where we have the benefit of pure air and the most favorable hygienic influences, would be greatly lessened.

In both these cases, however, I anticipated the dangers from septicæmia, and consequently commenced the liberal use of alcoholic stimulants and quinia simultaneously with the ergot, and kept my patients under their influence throughout the entire period of treatment. And this I regard as a matter of immense practical importance, and it may be owing to this precautionary measure in part, at least, that they escaped septic poisoning. If these remedies are curative of septicæmia, may they not also exert a prophylactic influence? I cannot see any valid reason for denying them this power. I would insist, then, that throughout the period of treatment with the ergot the patient should not only be supported by a nutritious diet, but that, to guard against the danger from septicæmia, quinia and alcoholic stimulants should be liberally administered.

In conclusion, I wish to make a few strictures upon a case of "Spontaneous Expulsion of a Large Intra-Uterine Fibroid Tumor," reported some months ago by Dr. R. Osgood Mason to the New York Pathological Society. Viewing the case in the light of my experience as recorded in this article, I must be permitted to demur to the term "spontaneous" as used in this connection by Dr. Mason. For, in his report, he says, "When the case came under my observation I learned that she had been taking pretty large doses of ergot for two or three weeks without any apparent benefit," and that "a few days later I saw her at her home, when she showed me some

membranous shreds, and also some distinct fragments of a fibrous tumor, which she had been passing for two or three days. After this, fragments of considerable size were daily torn off, and in twenty days from my first examination the last fragment came away."

The expulsion of this tumor in fragments, after using the ergot for two or three weeks, is presumptive evidence that it was the result of a sloughing process induced by this agent. This is certainly the most reasonable view to take of the case. In the absence of any other known cause of the expulsion of the tumor, and with the conceded powers of ergot to produce such a result, it is fair to conclude that instead of a spontaneous, it was a case of induced expulsion brought about by the ergot. Should this article meet the eye of Dr. Mason he will doubtless see reason for agreeing with me in this opinion, which is not advanced in the spirit of controversy, but in the interests of scientific truth.

FACIAL PARALYSIS FROM EAR DISEASE.

BY CHARLES SHAFFNER, M.D.,

Assistant Surgeon in the Eye and Ear Department of the Philadelphia Dispensary.

AMONG the rather rare complications of suppurative inflammation of the middle ear is facial paralysis,—an extremely disagreeable condition for a patient to be in, not only because his normal features are disfigured, but also his powers of mastication, speech, and the accompanying play of the features are much impaired, while the eye is threatened with destruction from the loss of its natural muscular covering. The following case beautifully illustrates this condition:

M. C., an Italian woman, 52 years old, applied for treatment on May 26, 1877, at the Eye and Ear Department of the Philadelphia Dispensary. She was in poor health, weak, and overworked. She had had no acute ear disease before the attack now to be related, while the right ear has been for some time affected with otitis media chronica catarrhalis.

About December 18, 1876, she was suddenly attacked with a severe coryza, sore throat, swollen cheek, great pain in the left ear, and about the same time the left side of her face was paralyzed, which condition still exists. On examination the lining membrane of the left external auditory meatus was found to be

swollen, some slight thick and green discharge to exist, and tinnitus to be present. On testing the ears with the watch, R. E. = $\frac{12}{18}$; L. E. = $\frac{0}{18}$.

To the tuning-fork the right ear was about normal, while she did not hear it at all in the left ear. The membrana tympani was thickened and retracted in the right ear, and a recent perforation was found in the left membrane. The Eustachian tubes were pervious. She complained of dryness and burning on the left side of the pharynx. The nasal passages were clear.

There was marked paralysis of the left side of the face, terminating rather abruptly at the median line. The wrinkles on the left side of the forehead and face were all effaced, and the side was smooth and shiny as in a person much younger. The left orbicularis palpebrarum was totally paralyzed, the eye being wide open, and could not be closed on strong effort. This had caused dryness of the cornea, with cloudiness and commencing ulceration. Vision was much diminished,—counting fingers at two and a half feet. The mouth was drawn to the right side, and liquids escaped from its left angle on efforts in swallowing. Its right side only could be puckered when she attempted to whistle. The tongue protruded to the right side. She complained of dryness of the left side of the mouth and pharynx, making it difficult to masticate on that side and to swallow solids, so that her food was mostly semi-solids and fluids. She frequently bit her left cheek, and the bolus of food would lodge between it and the gum. She noticed she had more taste on the right side. Tactile sensibility was undiminished.

We treated her by giving tonics and good food, finally sending her to the sea-shore for the summer.

The left ear was carefully kept clean by the syringe, and the suppuration finally checked by the use of a solution of zinc sulphate gr. v to fʒi.

The eye was strapped shut with little strips of sticking-plaster, which were removed every day, the eye cleansed, and the plaster replaced. This treatment caused marked improvement in the eye, so that on June 20, 1877, vision had come up to counting figures at eighteen feet. Her friends were shown how to apply the strips, and she was sent to the sea-shore.

She returned to the dispensary on December 12, when we found the perforation in left membrana tympani was still patulous and about one line in diameter. The otorrhœa was absent. Hearing in R. E. $\frac{2}{18}$; L. E. $\frac{0}{18}$. The facial paralysis had greatly improved, and many wrinkles had returned, especially on the cheek and about the mouth. The forehead and left temple were still rather smooth and shiny.

She can now shut the left eye, but not tightly, and the angle of the mouth is still im-

paired in motion. There is a small chronic ulcer of the cornea, for which calomel was insufflated. Vision has improved to counting fingers at twenty feet.

To understand this case thoroughly we should bear in mind the course and function of the facial nerve and its chorda tympani branch. Entering the internal auditory meatus with the auditory nerve, it passes through the aquæductus Fallopii, and follows the serpentine course of that canal through the petrous portion of the temporal bone to the stylo-mastoid foramen to be distributed to the muscles of the face and upper part of the neck, and is the motor nerve of the face. The aquæductus Fallopii runs in the internal wall of the tympanum, and is covered by an extremely thin plate of bone.*

The chorda tympani branch is given off from the facial nerve at the back of the tympanum, and in its course passes through the cavity of the tympanum, becoming covered with mucous membrane,† and finally meets the gustatory nerve, and is distributed to the submaxillary gland, submaxillary ganglion, and lingualis muscle.

As for its function, it is more connected with taste than with hearing.‡ “The integrity of the chorda tympani appears to be essential for the proper exercise of taste.”§

Thus we see that both these nerves are exposed to the full force of inflammations of the middle ear, such as our patient had at the outset of her troubles, when she had the severe otalgia. Any swelling of the mucous membrane of the tympanum may press on these nerves and arrest their function, or an inflammation may extend to them, and, by involving and destroying their tissue, create permanent facial paralysis and diminution of taste.

The indications for treatment are to relieve inflammation, stop suppuration with the syringe and astringents, protect the eye from dryness and foreign bodies, and stimulate the muscles with electricity. If degeneration of the nerves exists, the electricity will be useless, the paralysis permanent, and the muscles will become flaccid and partly absorbed.

Thus we are taught that an otitis media suppurativa is not entirely harmless and should not be neglected.

23 SOUTH SIXTEENTH ST., December, 1877.

* Roosa, Treatise on the Ear, p. 198.

† Gray's Anatomy, p. 542.

‡ Roosa, Treatise on the Ear, p. 230.

§ Smith's Marshall's Physiology, p. 376.

TRANSLATIONS.

THERAPEUTICS OF SALICYLIC ACID AND ITS COMPOUNDS.—From a protracted discussion on this subject before the Academy of Medicine of Paris, as reported in *Le Progrès Médical*, No. 36, 1877, pp. 690-692, the following points may be collected as interesting. On account of the irritating properties of the acid when used alone, it is preferable to use one of its salts, such as the salicylate of sodium, potassium, or lithium; and of these the sodium salt is least irritating, least disagreeable to the taste, and, in addition, is very soluble. No authenticated case of sudden death during the use of the remedy was mentioned, though doses amounting to 120 grains and 180 grains in twenty-four hours were given. Its value in acute articular rheumatism seems incontestable after the results of Sée, Hérard, Hardy, and Jaccoud, as reported to the Academy; some cases were mentioned where there was little or no benefit derived, but these had been treated with smaller doses than the patients of the clinical observers mentioned. The testimony in cases of chronic articular rheumatism is not so unanimously favorable. M. Sée states that the salicylic treatment should be extended to gout, as he has had good results in such cases; the experience of this one authority has not as yet been fully substantiated by other observers. The action of the drug in neuralgias has not been very fully tested as yet, but its power to cause diminution of temperature is considered to be tolerably well established. The remedy has been employed in typhoid fever, diphtheria, etc., with varying success, but further experimentation is required before the true position of salicylates in these affections can be determined. J. B. R.

BORAX AND NITRATE OF POTASSIUM IN SUDDEN HOARSENESS.—These two salts have been employed with advantage in cases of hoarseness and aphonia occurring suddenly from the action of cold (see *La France Médicale*, No. 86, 1877, p. 682). The remedy is recommended to singers and orators whose voices suddenly become lost, but which by this means can be recovered almost instantly. A little piece of borax the size of a pea is to be slowly dissolved in the mouth ten minutes before singing or speaking: the remedy provokes an abundant secretion of saliva, which

moistens the mouth and throat. This local action of borax should be aided by an equal dose of nitrate of potassium, taken in a warm solution before going to bed. J. B. R.

PARAPLEGIA CONNECTED WITH MENSTRUATION.—In the course of a recent clinical lecture, Prof. Peter (*Gazette des Hôpitaux*, 1877, p. 932) showed the two following cases. The first was a girl of 22, not hysterical, in whom the menses became suddenly suppressed following the administration of an emeto-cathartic. She presented formication in the lower limbs, pains in the loins, genuine incomplete paraplegia. The second was a girl, who had presented for two days formication, considerable enfeeblement of the lower limbs, with diminution of sensibility,—phenomena which disappeared almost entirely when the menses appeared. With reference to these cases M. Peter insisted, on the one hand, upon the relation so distinctly manifested in the first case between the disappearance of the menstrual discharge and the occurrence of paraplegia; and, on the other hand, on the coincidence between diminution of the paralysis and the normal evolution of menstruation in the second case. The relationship between the two phenomena just mentioned is not universally admitted. M. Hallopeau says that suppression of the menses does not give rise to congestion of the spinal cord; that this suppression may be due to an accident or to a physiological phenomenon, as the menopause; others, among whom may be cited Prof. Jaccoud, agree with M. Peter in believing that the arrest of the menstrual flow often gives rise to rachidian congestion, perfectly demonstrable post mortem, and susceptible of giving rise to transient disorders of spinal innervation. These nervous phenomena follow a course varying with the epoch of their appearance. When they appear in the period of utero-ovarian activity, they are sudden in their onset and acute in their course. When they show themselves at the time of the menopause, these disturbances of sensation and motion are slow, progressive; they develop little by little, so to speak, until they finally attain consummation in paraplegia. (*Gaz. Hebdom.*) x.

PODOPHYLLIN IN HEPATIC COLIC, BILIARY CALCULI, AND INTESTINAL CATARRH.—In addition to the well-known action of podophyllin in overcoming habitual con-

stipation, a new effect of this remedy has recently been observed, namely, the relief of hemorrhoids. Besides this, Dr. Bufalini has suggested its use in hepatic colic, etc. M. Van den Corput recognized some time since the favorable action of podophyllin in hyperæmia of the liver with stasis in the vena porta, the amount of bile being increased, while at the same time the solid constituents of this secretion are augmented. M. Bufalini had under his care recently a woman, 45 years of age, who had long suffered from hepatic colic. She was accustomed to use violent purgatives which brought away voluminous calculi, giving marked relief on each occasion. The use of purgatives had induced intestinal catarrh, notwithstanding which M. Bufalini prescribed small doses of podophyllin,—1 centig. ($\frac{1}{16}$ gr.),—under the somewhat prolonged use of which the patient entirely recovered. In another similar case $\frac{1}{8}$ gr. of podophyllin was taken daily for some time, to the entire relief of the patient. Bufalini explains the action of podophyllin by the fact that it excites the formation of the biliary secretion, while facilitating its flow, thus preventing the retention and aggregation of those matters which go to make up biliary calculi, and rendering the formation of these aggregations impossible. He also considers podophyllin in small doses beneficial in intestinal catarrh on account of its action in promoting the flow of the bile into the intestine, and thus regulating its functional activity. x.

A SIGN OF IMMATURITY IN NEW-BORN CHILDREN.—Küstner (*Cbl. f. Gynäkologie*, 1877, No. 9) calls attention to white comedones which are found on the face and forehead, and particularly on the under lips and chin, of infants born before full term. These enlarged and choked sebaceous glands are found in smaller numbers the more mature the foetus is, until when it is born quite mature the plugged-up glands are only observable on the point of the nose. x.

THE HYPNOTIC ACTION OF LACTATE OF SODIUM.—Bötticher (*Berlin. Klin. Wochens.*, 1877, No. 37), having examined this subject, comes to the following conclusions. Lactic acid, so far as it has been tried, has proved incapable of producing sleep invariably and in all cases. It is, therefore, an uncertain hypnotic, and is incapable of replacing morphia and chloral in diseases

when sleep is desired. Its hypnotic effect is more certain in the young than in adults, in women than in men. When sleep follows, it sets in one to two hours after the medicine has been taken. The hypnotic effect is less marked when it is taken on an empty than on a full stomach, more marked in the evening than during other periods of the day. No period of excitement goes before the sleep, but disagreeable concomitant symptoms sometimes show themselves, especially in the digestive tract. Lactic acid has no anodyne action. If lactic acid were regular in its effect, it would be preferable to other hypnotics, because it is one of the normal substances appearing in the organism. Besides the hypothesis that the collection of lactic acid in the organism is the cause of rheumatism, it has been asserted by Rauch that it gives rise to parenchymatous inflammation of the endocardium and valves. Goltz found that after prolonged use of lactic acid the red corpuscles become dissolved, fatty degeneration of the liver, kidney, and heart ensues, and ecchymoses and even hemorrhage from the mucous membrane of the stomach may result. x.

ACTION OF HYDROCYANIC ACID ON THE CIRCULATION AND BLOOD.—Rossbach and Papitzky (*Cbl. f. Med.*, 1877, p. 640; from *Würob. Phys.-Med. Verhdlg.*, 1877, x. s. 205) make the following statements. That retardation and stoppage of the heart's action, which is caused in frogs by the action of hydrocyanic acid, is not in the least influenced by atropia, although the inhibitory nerves of the heart may be paralyzed. It results from this that the action of hydrocyanic acid upon the heart occurs without intervention on the part of the vagus fibres. In warm-blooded animals the heart's action was less involved than Preyer has asserted. The pressure at first rises abruptly, but soon falls again below the normal to rise once more to the normal line and then once more to sink continuously to zero. The frequency of the pulse, on the other hand, shows no immediate increase, but begins at once to diminish, while the energy of the individual beats is increased. Later the pulse becomes more frequent, without, however, reaching the normal, and becomes, at the same time, weaker, until the heart only makes undulating movements, which, however, continue after the general appearances of death have set in. Paralysis of

the cardiac vagi by the poison has not been observed by Rossbach and Papitzky, nor have they noticed any change in the cardiac symptoms when the vagi have been eliminated by atropia. The peculiar bright color of the blood appears suddenly at the time when the blood-pressure begins to sink. The earlier increase and subsequent decrease in the blood-pressure our authors, as well as Boehm, refer to irritation, followed by paralysis of the vaso-motor centre. In poisoned frogs a marked enlargement of the small vessels may be observed microscopically. x.

ON THE SO-CALLED ANTAGONISM BETWEEN ATROPIA AND MORPHIA.—Binz (*Cbl. f. Med.*, 1877, p. 655; from *Deutsch. Med. Wochenschr.*, 1877, No. 12) poisoned a very young dog with 0.075 millig. morphia: sensorium paralyzed; pulse diminished from 140 to 42, extremely weak; respiration 22, very shallow; temperature 3° - 4° below normal. Then $\frac{1}{2}$ millig. sulphate of atropia was injected subcutaneously. Ten minutes later waked. Cardiac pulsation distinctly perceptible, 140; respiration 52, full; temperature still low. The animal recovered. Binz performed similar experiments, in connection with Heubach, on large dogs. The blood-pressure was doubled. In the sense that atropia can revive an animal poisoned by morphia (within certain limits), by bringing the respiration and circulation into a better condition, antagonism between these two alkaloids cannot be denied. x.

INFLUENCE OF TOBACCO ON THE GREATER FREQUENCY OF TYPHOID FEVER IN MALES.—M. Caron has presented to the Society of Practical Medicine of Paris (*La France Médicale*, 1877, No. 87, p. 691) a paper in which he advances the idea that the greater relative frequency of typhoid fever in males may depend upon the almost universal habit of smoking among men, especially as the habit is so often begun at a very early age, before the subject has attained the full powers of adult life. He says that the first experience of smokers shows conclusively the active effects of vapor of tobacco upon the brain, stomach, salivary glands, and buccal mucous membrane; and it is but reasonable to suppose that contaminated saliva swallowed must exert a deleterious influence upon the economy, for it is absorbed by the chyliferous and lymphatic vessels. To the objection that might be raised that old smokers do not experience

much increase of saliva, and hence do not expectorate, he replies that the reason is easily understood; the salivary glands are annihilated and paralyzed, which accounts for the use, by such persons, of supplementary potations of an alcoholic nature to take the place of the saliva. Thus, finally, owing to the toxic nature of the agent and the deterioration and diminished quantity of the natural salivary fluid which cannot be replaced by beverages, the organs become fatigued, the blood impoverished, the secretions perverted, and the entire organism subjected to that depression of forces which opens the scene of typhoid manifestations. The author thinks the subject should be thoroughly investigated from this point of view. If the use of tobacco by smokers is thus a predisposing cause of typhoid fever among the French, who as a nation do not chew tobacco, how much more likely to be an important factor in America, where the habit of chewing is so wide-spread, for its influence would apparently be more deleterious than inhalation of tobacco vapor. J. B. R.

TREATMENT OF DILATED STOMACH BY THE STOMACH-PUMP.—*La France Médicale*, 1877, No. 88, pp. 698, 699, gives the report of a case treated by M. Audhoui, after the method of Kussmaul. The patient, who had dilatation of the stomach (probably from cicatricial contraction at pylorus), suffered for a number of years with hæmatemesis, vomiting, gastralgia, and progressive debility. As many methods of treatment had been tried, it was determined to employ mechanical measures, and accordingly an œsophageal tube was introduced, through which the contents of the stomach were withdrawn and the organ afterwards washed out with artificial Vichy water. Pills of iron and of aloes were administered as indicated, and food was allowed after the stomach had been washed. The condition of the man soon showed marked improvement: he gained strength, had little or no pain, and remained out of bed nearly all day. He was discharged from the hospital at his own request, but continued the use of the tube, introducing it twice daily before eating. After washing out the stomach he soon experiences a sharp appetite. If he ceases the treatment, vomiting recurs. Although the case was not cured by the method, the patient's life was saved for the time, and he was enabled to return to work. J. B. R.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, JANUARY 19, 1878.

EDITORIAL.

OUR POVERTY.

IN considering the question of dispensary reform, attention may well be first directed towards those forces which constitute the *vis a tergo* in supplying the material of the clinic, and which may be summed up as the expensiveness of paid medical relief.

By the profession wide-spread endorsement has been given to the fallacy that the services of a physician are worth a certain sum, irrespective of the reputation, character, etc., of the individual doctor, —an endorsement which has found its especial expression in the so-called fee-bills. That this is a fallacy is most readily shown. The indisputable fact that there are differences of skill, constitutes a solid basis for differences of charges. More than this, in every profession, and even in every trade or business, the money value of reputation is practically acknowledged. John Smith may paint as handsome a yoke of oxen as comes from the easel of Rosa Bonheur, but it will not command the same price. Recognized skill, and skill struggling for recognition, commercially are very different wares. Fortunately, in this portion of the country, at least, the real nature of the fallacy under consideration is being rapidly recognized. The clearness with which it was shown in the last debates upon the subject at the College of Physicians of this city led to the abolition of the fee-bill, and did much to break through the mists which have hung so thickly about the thinking upon this and kindred subjects. A second fallacy, not so fully exploded, is that it is beneath the dignity of a physician to accept an

honorarium below a certain amount. Very often may doctors be heard to say, "I charge a dollar a visit or nothing." True dignity never rests upon fiction: dignity so founded is brass, or, at the best, gilt jewelry. The idea involved in the assumption of dignity in the present case is that it is undignified for a man to tacitly acknowledge that his time is worth so little. If the doctor can say truly, "Mr. —, my time is worth more than that to me; I cannot afford to attend you. You can get some one who is younger or less known, though, it may be, just as skilful as myself," well and good; if otherwise, let the doctor say, "I will attend your family for fifty cents a visit," and not dress himself in the airs of extraordinary success, when the unpaid family baker, landlord, or other creditor, or the shabby, badly-cared-for children, or the care-worn face of the wife may at any time prick the bubble of his false pride and let out the dignity. True dignity is founded upon honesty; and the man whose time would otherwise be unoccupied would usually consult his true interests by charging whatever he can get.

Another puerile fallacy, not exactly in point, but so evidently resting upon a similar false basis, which has done much in Philadelphia to injure professional incomes,—many times more than the dispensaries have,—is the idea that it is extortionate and dishonest to charge over a certain rate. It is dishonest to take advantage of people, and when they have employed you, thinking that your charges are ordinary ones, to send a bill for triple the usual amount. But it is not dishonest to charge one hundred dollars or two hundred dollars, or any other price, per visit, provided persons are aware of it when they ask for services. It is no more dishonest than for Rosa Bonheur to ask more for her pictures than her brother receives for an equally good article, or than for a merchant to mark up his goods when the market price rises. It is not the intrinsic worth, but what

it will fetch in open, honest market, that justly controls the price of a commodity.

The principle being acknowledged that those of the profession who cannot get more should charge less, and that the poorer classes of society should receive not necessarily poorer services, but services of less reputation at a less price than is paid older members of the profession,—the next point to be considered is, How can the cheapest service be afforded by the doctor? In doing this, it should be remembered that the counter-practice of druggists injures physicians' incomes much more largely than do the dispensaries, and that, if the profession is to obtain all it legitimately can from the people, the absurd and in a large measure local prejudice which in Philadelphia to a less or greater extent taboos the doctor who furnishes his own medicines must be done away with.

Those of our readers who have followed Dr. J. Milner Fothergill in his admirable London letters have the advantage of the experience produced by the very free, intensely active, and close medical competition in England. Office services at a low fee with medicines furnished, working-men's clubs, provident dispensaries, etc., etc., have been practically tried abroad, and the results have been laid before our readers. Space is wanting at present in which to gather up these facts for editorial discussion, and we can only call attention to some general principles which should be borne in mind. A fixed certain income does not have to be as large as one that is fluctuating and uncertain, to enable its possessor to live comfortably and with peace of mind. The principle of trade that a wholesale business can be conducted upon a much narrower margin than a retail is also not devoid of application to medicine.

It is clear that mere writing will never accomplish more than paving the way for action. The time does seem ripe for individual or concerted movement, and those

who complain so bitterly of the dispensaries had better occupy themselves with deciding upon and carrying out some of the plans which have been so frequently discussed in the columns of this and other medical journals.

In regard to diminishing the attraction of the dispensaries, the point to be borne in mind is that as far as is possible sacrifice should be required of those who enjoy the benefits of the charity, in some measure commensurate with a small fee. Thus, the dispensaries should be reduced in number, and should be stationed far apart: the difficulty of travelling long distances, the weariness of waiting, the value of the time occupied, would undoubtedly deter many from abusing the charity. Further, every dispensary should contain a conspicuous placard stating that free medical services are given only to those who cannot afford to pay even small fees, and the wording should be such as to make persons obtaining free medical care wrongfully feel guilty of dishonesty. If to these precautions were added watchful care, and a direct honest questioning of those applying for relief, most, if not all, of the ground for the outcry which has been raised against this form of charity would, we think, soon disappear.

LEADING ARTICLES.

A NEW TREATMENT FOR ELEPHANTIASIS ARABUM—NERVE-SECTION.

DR. THOMAS G. MORTON, of this city, has lately attempted the treatment of elephantiasis Arabum in such a new and successful manner that we desire to call the attention of the profession to the subject by a brief mention of the previous history of the case, together with an outline of the doctor's plan of treatment, viz., by the operation for nerve-section.

The patient was a colored man, thirty-four years of age, a farm-laborer, and was first admitted to the Pennsylvania Hospital on December 1, 1873. He had been

a slave in Virginia, where he was born and always resided until after the war, when he came to this city. His father was crippled by a fall, but was otherwise in good health; his mother was also healthy. He and a younger brother were the only ones out of fifteen children who suffered from enlargement of the limbs. He had never been in Barbadoes.

Fourteen years before coming into the hospital he noticed the first symptoms of increasing size of the right leg. At first he had some pain, especially at night, but of late years he had been able to work as well as any one, and only felt inconvenience from the weight of the limb and from a serous oozing that issued from some abrasions and kept his foot cold and wet. His general health was excellent, the disease being mainly confined to the right inferior extremity, which was markedly ichthyotic from the middle of the thigh down to the instep. The skin and superficial cellular tissue were very much hypertrophied, and hung in large folds over the ankle-joint. Under some portions of the thick, scaly epidermis there were effusions of pus. The left leg above the ankle was slightly enlarged, but the surface seemed natural. The skin of the abdomen showed impairment of nutrition and alteration of structure, which the patient said was the result of a scald received when he was young.

Dr. Morton tied the femoral artery at the usual place on December 12. The temperature of the limb, taken on the eighth day after the operation, was 98° between the toes, and 101½° on the surface of the calf (the thermometer being held in position for one hour). The axillary temperature was 99°. The limb was enveloped in a poultice of flaxseed in order to remove the old epidermis. The ligature came away on the twenty-first day, and the small wound remaining speedily closed. The limb was then enveloped in a roller bandage firmly applied. This bandage was exchanged on January 7, 1874, for one of India-rubber, which was, however, removed at the end of four hours on account of its producing numbness. The compression was, nevertheless, resumed as a regular part of the treatment, and the limb gradually and steadily decreased in size. The patient was discharged on March 21, very much benefited. [There was a marked improve-

ment after the separation of the ligament, but, as firm compression was steadily maintained with the limb in a horizontal position, it was difficult to know how much of the improvement was really due to the operation.] The patient was subsequently admitted into the Philadelphia Hospital, and, by the kindness of Dr. Brinton, Dr. Morton had another opportunity of examining him. The limb was found to be nearly as large as it was prior to the ligation; the patient, however, considered himself much improved, and thought that the operation had markedly arrested the progress of the disease. (See *American Journal of the Medical Sciences*, April, 1876, page 337, case vii., Morton on the Ligation of Large Arteries.)

The patient was readmitted to the Pennsylvania Hospital on November 9, 1877. The right leg was found to be double its size when last seen, measuring *twenty-one* inches in circumference. From the exceedingly cumbrous character of the limb, the man desired to have an amputation performed.

Having noticed the frequency with which operations for nerve-section are followed by atrophy of the parts supplied by the nerve which is cut, Dr. Morton determined to attempt the artificial production of atrophy of the right lower extremity by section of the motor nerve of that limb. Accordingly, on November 17 of last year, *the right sciatic nerve was laid bare, and one and one-half inches of its length excised at the upper third of the thigh.* No unpleasant symptoms have occurred since the operation incident to the section. There has been a steady diminution in the size of the limb ever since. On January 3 of this year it was measured and found to be but *twelve and one-half inches in circumference, a reduction in circumference of some eight and one-half inches.*

An interesting feature in the case, Dr. Morton tells us, has been the desquamation of all the thick skin which covered the limb from the knee to the ankle and foot, especially about the lower third of the leg. Patches of the skin, one-sixteenth of an inch thick, have peeled off from time to time, leaving a perfectly clean, soft, and pliable skin beneath. There has not been the least disposition on the part of the skin to ulcerate, and the lost sensibility is confined to the extreme anterior portion of the dorsum, all of the sole of the foot,

and a strip of integument running directly up the posterior part of the leg to about the middle point between the heel and the popliteal space. This strip is about two inches in width. On all portions of the leg, except this anæsthetic strip, the patient is able to distinguish between the compass-points, provided they are held at a distance not less than an inch apart. This shows that the sensibility of the larger part of the limb operated upon has been but very slightly impaired. The man has suffered from a severe attack of pleuro-pneumonia since section was performed, but this was in no wise an effect of the operation.

We are happy to say that to Dr. Morton alone are due the congratulations of the profession and public at large for the conception and performance of this novel and (judging from his first case) highly successful operation for the relief of what has always hitherto seemed to be a most troublesome and but partially curable affection at the hands of the surgeon.

CORRESPONDENCE.

LONDON LETTER.

SMALLPOX has not been very active for some time, but is now once more on the increase, and caused twenty-five deaths last week. On the hypothesis that open weather is conducive to the spread of zymotic disease, this is intelligible, as we have had but two frosty nights yet, and the thermometer keeps high for the time of year. Indeed, we have had a series of gales with driving rain recurring at intervals. The British public have been greatly impressed with the accuracy with which the time of these gales has been predicted by an American weather-prophet connected with the *New York Herald*. Ship-owners ought to be very much obliged to him, but as to the bulk of people they would thank him to tell them when some fine settled weather is coming. Perhaps this may not be so much in his line; but if he only could manage it he would be a much more general favorite than he is at present.

An interesting event occurred at the Samaritan Free Hospital on the 12th instant. Mr. Spencer Wells performed his last ovariectomy in that hospital, where he has labored for twenty years, and with whose reputation his own is so closely linked. Mr. Wells has made the Samaritan Hospital, and in return the hospital has done no little for him. After the performance of the operation, Mr. Wells reviewed his twenty years' work there. He told how in the autumn of 1857 a woman was in that hospital with what appeared to be an

ovarian tumor of the left side. It was decided to perform ovariectomy. "As soon as I opened the peritoneum, and it was proved beyond all doubt that the tumor was behind the intestines, I was induced to close the wound and do nothing more. The patient recovered without a bad symptom, but died four months afterwards in St. Bartholomew's Hospital, when it was found there was a tumor of the left ovary, which might have been removed quite easily." This led to the offer of a patient who had been relieved by tapping several times, and who was willing to face anything. Complete ovariectomy was successfully performed upon this patient in February, 1858. The pedicle was secured by whipcord ligature, and left hanging out of the wound, after the fashion of the early ovariectomists. Slowly and by degrees the operation made its way: in the first five years Mr. Wells performed it 30 times; in the second five years, 82 times; in the third five years, 132 times; and in the last five, 159 times. The mortality has steadily decreased as greater experience was acquired. Of the first 30 cases, 9 died; of the second list, out of 82, no less than 21 died,—a heavy percentage; of the third list, out of 132 cases, 36 died; and of the last 159 cases, only 33 died. The mortality of the last two years has only been a little more than ten per cent.; the percentage of the first series being nearly thirty per cent. Thus ovariectomy has made its way from an operation of exceeding gravity, ranking with the most serious amputations, to that of an ordinary amputation of the leg, or thereabouts. Mr. Wells then referred with natural and pardonable pride to the visitors' book and the names written therein. He said a glance over them would demonstrate the wide-spread interest felt in the operation, and men from the most distant parts of the globe had there seen what they carried back with them to their own countries. By such means the experience of that little cosmopolitan hospital had been carried away to the remotest sisters in suffering. Mr. Wells said he had never adopted the antiseptic plan of treatment, which was now on its trial by his junior colleagues. He said he had not yet seen enough of it in ovariectomy to warrant us in saying more than that the evident objection of operating in a chilly mist may be partially avoided; that no great harm is done by peritoneal absorption of carbolic acid; that dressings are simplified; and that hyperpyrexia is less to be feared. He thinks the introduction of thymol will do much to make antiseptic surgery more acceptable. It has a very pleasant odor, has no poisonous properties, and is a much more effective germicide than carbolic acid. One factor in the lessened mortality was, in the opinion of Mr. Wells, the rule established in 1873, viz., that every visitor should sign the following declaration: "We, the undersigned, have not been to any post-mortem examination, nor any dis-

secting-room, nor attended any case of infectious disease, within the last seven days." It must be very gratifying to Mr. Wells to look back on his twenty years' work,—how from small beginning great things grew. His name is indissolubly blended with the practice of an operation of primary importance, which at one time was regarded as scarcely permissible at all. Now Mr. Wells leaves behind him a staff of men who are regularly engaged in the prosecution of the operation, and a hospital whose reputation is world-wide, and over which his own fame will ever remain as an ægis, and of which in time he will be held to be the tutelary genius.

There is little of interest in the literary department of medicine at present. No books of any novelty or exciting much comment are announced in our publishers' columns as to appear this season, with one exception. This exception is a new medical journal to be devoted to the nervous system in health and in disease. It will embrace the psychological as well as the physiological aspects of the nervous system, and also the pathology and morbid anatomy. At the present time such a journal is urgently called for, for it embraces the topics on which public attention is at present most excited, viz., the relations of the mental processes to cerebral activity, the gradual evolution of the brain with corresponding development of intellectual powers, the correspondence betwixt increasing depth of convolutions and ascending intelligence; and, on the other hand, the relations of senile decay of the mental powers to the changes which can be detected with the microscope, of the imperfect evolution of imbeciles, of the dissolution wrought by recurring epileptic discharges, and the downward movement of disease in the nervous centres. This is obviously a very important affair, and such a journal should not be launched into the world without a very competent crew to manage it. This new journal has a brief but comprehensive title: it is denominated *Brain*. It starts with four editors, and is to be published by the well-known firm Messrs. Macmillan & Co. The first editor, *primus inter pares*, is Dr. J. C. Bucknill, a Fellow of the Royal Society, late Lord-Chancellor's Visitor in Lunacy, and co-author with Dr. Hack Tuke of the well-known hand book on psychological medicine, which has been for many years the leading manual on the subject of which it treats. Dr. Bucknill has for long been intimately associated with the advance of mental pathology in all its forms. The second editor is Dr. J. Crichton Browne, now Lord Chancellor's Visitor, and late medical superintendent of the West Riding Asylum. It was during his tenure of office in this great Yorkshire asylum that Dr. Browne gained his well-earned reputation. He made this institution into a true school of psychological medicine. He built a pathological museum, and he gathered

round him a band of workers. To keep up their ardor, he gave the most hospitable reception to London workers whenever he could attract them to Wakefield. By means of his staff, and some help from others who visited his asylum to work there, he brought out the West Riding Asylum Medical Reports, which have attained a foremost position amidst the literature of the nervous system. It was the cessation of these reports on his leaving the asylum which led up to the determination to start this new journal of the nervous system. The third editor is a man whose name is even more widely known than either of those yet mentioned. Dr. Hughlings Jackson's name is a household word with all who have worked at the diseases of the nervous system. His steady labor, his acute clinical observation, and his accurate reasoning upon the data so furnished to him, are too well known to need any eulogy from me. His recognition of epileptic attacks as discharging lesions has formed one side of the bridge, of which experimental research has furnished the other half, which will lead us over some of the gravest difficulties in coming to a fair understanding of the working of the brain, alike in health and in disease. The fourth and last of this able quartet is Dr. David Ferrier, whose researches into the nervous system have recently become so widely known. A favorite pupil of Prof. Bain's, of Aberdeen, learned in all the metaphysics and psychology requisite for the proper study of the material organ the brain, having sat at the feet of the late Prof. Laycock, of Edinburgh, whose real worth as a teacher has never yet been properly appreciated. Dr. Ferrier gained a gold medal for his graduation-thesis on the histology of the brain. Since then he has worked at the nervous system with much assiduity, and his continuation of the researches of Fritz and Hitzig gave them quite another value to what they possessed ere he took them up.

Such, then, are the qualifications and the antecedents of the editors of this new journal; and if capacity and fitness on the part of its editorial staff can secure the success of a journal, we may safely predict for *Brain* a position and a success to which but few journals can ever hope to attain.

One of the most interesting discussions which have taken place at any of the metropolitan societies this season was that on *Chyluria* at the Pathological Society. It commenced by an account of such form of malady in a gentleman born in Barbadoes, who had suffered from what is termed in the West Indies "hemorrhage from the kidneys." After that he had intermittent attacks of chylous urine. The appearance of chyle in the urine was followed by backache, languor, and pain in the testicles. When the urine is allowed to stand, a delicate coagulum forms on the surface, while the layer at the bottom consists

of a bloody fluid. On examination, swollen blood-corpuscles could be seen under the microscope. Dr. Dickenson, whose works on Diseases of the Kidney are so well known, then related particulars of a case which had been for some time under his care, and exhibited specimens of the urine. This patient had never been out of England, so there was no suspicion of the possibility of her possessing any filariæ, which are the cause of the malady in India. When she first came under his care at St. George's Hospital, her urine was like a specimen of rich milk, as if from an Alderney cow. The amount of blood in it was considerable. It also contained much albumen. At one time it formed a coagulum so firm that it resembled a jelly-fish, and was preserved in spirit. It was due to the regurgitation of chyle into some part of the urinary apparatus below the uriniferous tubules of the kidney. That was proved by the fact that no tube-casts were ever found in cases of chyluria. Yet with a fluid so rich in albumen and blood-corpuscles, casts must be formed, either blood-casts or fibrine-casts, if this fluid passed down the tubuli uriniferi. Chylous urine is not a renal secretion so far as the chyle is concerned. This patient, then twenty-one years of age, only weighed a little over seventy pounds when admitted into the hospital; now she weighs over one hundred and thirty pounds. The proportion of chyle at one time was twenty grammes; now it is but one and three-fourths grammes. It had been pointed out by Dr. Vandyke Carter that chyluria was due to a mechanical admixture of chyle with the urine; and it was evident it was due to a regurgitation of chyle into the urine at some point below the tubules of the kidney. Dr. Ord gave an account of the same patient taken about a year before she came under Dr. Dickenson's notice, and of an examination made of her urine by Dr. Thudichum, who found that the constituents of chyle existed in it in the same proportion as in normal chyle. It was evident that there was some direct communication betwixt the chyloferous vessels and the urinary passages. Another case, in an Algerine Jewess, was then related by Dr. Morison and Dr. Leared. In this case also the urine was clearest in the morning and most chylous towards evening and after meals. Dr. Murchison inquired as to the connection which existed betwixt external discharges of chyle and chylous urine, and in reply Dr. Dickenson said that they frequently alternated. When the thoracic duct was blocked, the lacteals and lymphatics behind might become stretched until their valves became insufficient, and then regurgitation ensued. Chylous exudations were produced in the same way. The most interesting point in the whole discussion was that of the treatment of this condition. On the assumption that chyluria was a mere regurgitation of chyle, the late Dr. Bence Jones once at-

tempted to use pressure by the application of a bandage round the kidneys, but without good results. Pursuing this idea, Dr. Dickenson had fastened a tourniquet over the lowest lumbar vertebra, and the immediate effect was striking. The urine was scarcely at all chylous after, and was of a urinous odor. It never recovered its full chylosity, and ever since had been but a bad specimen of chylous urine. Chyluria has nothing to do with kidney diseases, and is in no way to be regarded as a renal affection.

Prof. Lister made his *débüt* into London medical societies the other evening at the Pathological Society. There was a large gathering of members, probably more to see him than from interest in his subject-matter,—"Lactic Fermentation in Relation to Pathology." The lecture was very different from the ordinary staple matter of the Society's transactions. An elaborate account of his method of performing his experiments on milk was illustrated by specimens of milk preserved completely since August last, and others illustrating different forms of milk-fermentation. He showed that the sour fermentation of milk was due to the presence of the motionless bacterium *lactis*,—a comparatively rare form of bacterium, rarely found elsewhere than in dairies. Other bacteria set up fermentation, but of quite a different character to that set up by the milk bacterium. Prof. Lister spoke for an hour and a half, without notes, never once hesitating amidst his very difficult subject, with its minute details, and impressed his audience very favorably indeed. Profs. Burdon Sanderson and Charlton Bastian spoke after Mr. Lister,—the one proposing a vote of thanks, the other seconding it. Some account of Prof. Lister's experiments might be interesting to your readers, but it would simply be impossible by words to convey any adequate idea of the nature of the experiments and their wonderful minuteness in detail, and of the care which enabled the glass plates, with their glass covers, containing small wineglassfuls of milk, preserved since last August, to be brought from Edinburgh to London without breakage or spilling. Altogether, Prof. Lister's introduction to the London societies may be regarded as an accomplished success. For years Mr. Lister has been a Fellow of the Royal Society of London as well as of that of Edinburgh.

In this season of *bronchitis*, it may be practically useful for your readers to know the great utility of strychnine as a true expectorant by its action upon the respiratory centre. Like ammonia, it does not act upon the mucous lining of the air-tubes, but upon the nervous centres of the respiration. The experiments of Prokop, Rokitansky, and others, with this agent, show that it has a decided action in stimulating the respiration by acting upon the respiratory centre in the medulla oblongata. Ammonia acts in the same man-

ner. Ammonia is commonly added to cough mixtures for its stimulant expectorant effect. It enables the patient to respire more perfectly and so to expectorate the phlegm more effectually. This is of the utmost importance in bronchitis when the stage of free secretion is reached and the air-tubes are full of mucus and the patient is in danger of choking. Here the battle lies betwixt the powers of the patient and impending exhaustion. The ordinary mixture of carbonate of ammonium, spirits of chloroform, and senega is very useful; and some tincture of squill will be found a useful addition. But increasing clinical experience of strychnine leads the writer to the conclusion that of all agents which exercise a stimulant effect upon the nervous mechanism of the respiration, strychnia is one of the most potent and useful. Strychnia acts powerfully upon the expiratory part of the respiratory act, and kills, by producing spasm of the muscles connected with expiration. It is very useful, then, when expiratory efforts are required for the expulsion of mucus gathered in the air-tubes. In chronic bronchitis, with emphysema, it is of great service, and in the dyspnoea connected with advanced Bright's disease it is very efficacious. It produces good effects when given alone, and is a useful addition to ordinary cough mixtures. A combination of carbonate of ammonium, tincture of nuxvomica, and tincture of squill, is a most excellent mixture for patients suffering from dyspnoea, and generally procures them "more breath," as they phrase it. One of the most important matters connected with such use of strychnia is its relation to sleep. In many of these cases sleeplessness is a prominent factor; and sleep can be procured only by a narcotic. But while the narcotic acts upon the nervous system generally, it also acts upon the respiration, probably at its centre in the medulla, and the patients are apt to wake up with an attack of dyspnoea. A series of cases has demonstrated that by the use of strychnia the respiration is so improved that the patient can go to sleep without the narcotic, and, more than that, sleep fairly well, and be quite free from attacks of breathlessness, which awaken the patient and cause him to add voluntary respiratory efforts to the automatic act of respiration. By resort to strychnine these patients can be much relieved. In a case seen recently of complex lung and heart mischief, to which was added chronic chloral poisoning, the good effects of strychnia were very marked. The patient was almost at once relieved from the attacks of dyspnoea in the middle of the night, to which he had long been subject. By the use of strychnia during the day, a narcotic pill at bedtime is often deprived of its tendency to produce nocturnal dyspnoea; and strychnia may be usefully prescribed in cases of shortness of breath, where there has been also long indulgence in hypnotics. There is no

such thing in this world as unalloyed good, and strychnia, so used, sometimes acts so powerfully upon the bladder-centres, and produces such irritation there, as to necessitate its discontinuance. But this is not the rule by any means.

J. MILNER FOTHERGILL.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, NOVEMBER 8, 1877.

The PRESIDENT, DR. H. LENOX HODGE, in the chair.

Delivery of large fibroid tumor from uterine cavity. By Dr. MICHAEL O'HARA.

SAW Mrs. De C., æt. 32, first on October 28, 1877, suffering from uterine hemorrhage. She was quite blanched, and in an exhausted condition from repeated hemorrhages for seven years, as well as from the privation of the necessities of life. The uterus appeared to be about the size of a five-months pregnancy, larger and thicker at the left superior portion than at the right side. She declined examination, and was ordered ergot and *ol. erigerontis Canadensis*, with iron, quinine, and liberal nourishment.

She has no family history of fibroid growths. She menstruated first at thirteen years of age. Menstruation has always been copious and regular. Between her menstrual periods for the last seven years she has had on an average four additional losses of blood. She married seven years ago, but has never conceived; and her hemorrhages commenced immediately after her marriage.

On 30th, upon examination found os open about the size of a quarter of a dollar, some bleeding, and tumor presenting; no pains. Ergot was given freely. At 11 P.M. found her in active labor, os out of reach, and not to be found, by reason of a large mass blocking up completely the vagina. Dr. Garretson was called in consultation. By dint of use of fingers inserted into texture of tumor, the application of obstetrical forceps, and the use of the hook attached to the obstetrical forceps, the mass was brought away. Whiskey was freely used, but the patient was not anesthetized, on account of using the bearing-down efforts of the patient, which, with manual compression of the uterus aiding her pains, accomplished much. In a short time, and in the same way, the second mass was delivered. After this, by use of the fingers, etc., and with force, all that could be extracted of that part attached to the uterus itself was torn away. Some pieces were left attached to the uterus on account of the exhausted condition of the patient, to be allowed to slough away if not expelled by the uterus itself.

The mass, though appearing to be composed of three pieces, was really all one tumor, weighing in all about twenty-nine ounces. The first part extruded was really a portion only, and you could see the place of attachment to the second mass, while the pedicle, or rather base, to which the second portion was attached, was quite large, and more fibrous in structure than the tumor, which appears to be undergoing fatty transformation.

The tumor is now much shrunken. One of the masses is oval in shape, four inches long, three and a half inches wide, two inches thick. This was first removed, tearing it from its pedicle of attachment to its fellow, which was one line thick, two inches wide. This mass is very firm, white, and somewhat lobulated.

The second mass was much softer, of the size and shape of a large orange, and was apparently attached to the whole upper portion of the uterus by a broad expanded base of dense fibrous tissue. Three portions of this base, two or more inches in diameter, were each separately removed by force. There was little hemorrhage during the operation or afterwards. There was much exhaustion from pains and the severe contractions of the womb. On ergot, iron, and quinine, nourishment and stimulus, though excessively reduced, the patient is doing well.

Report of the Committee on Morbid Growths.

—The tumors removed from the uterus, presented by Dr. O'Hara, are seen to have, upon microscopic examination, the structural elements of fibromata, consisting of bundles of fibrillar connective tissue, arranged without any regularity as to direction, so that a thin section exhibits transverse, longitudinal, and diagonal cuts of the fibres. The cells are not numerous, spindle-shaped and stellate in form, some containing an oval nucleus. The blood-vessels are few in number, and have their walls greatly thickened by connective tissue.

"September 22, 1877."

Spina bifida. Presented by Dr. WILLIAM H. PARISH.

M. R., a female child, came under my observation, when two weeks of age, at the clinic of diseases of women and children at the Jefferson College Hospital. She was of small size, very feeble, and extremely restless.

A spina bifida existed over the lower lumbar and the sacral region. The tumor existed at birth, and, when first seen by myself, was about the size of a small orange, tense, slightly fluctuating, with a glistening, reddened, somewhat umbilicated surface.

The lower extremities were disproportionately small, with evidence of imperfect vascular circulation. They were quite motionless, and there was marked double talipes equinovarus. There were frequent small fecal evacuations, and frequent or continuous urination.

The extreme debility of the child, the apparent absence of control of the bladder and rectum, and the complication of aggravated club-foot, seemed to contra-indicate any operative interference with the tumor.

The only local treatment was that of gently supporting the mass, by means of a pad of cotton and a bandage.

Later, superficial excoriation occurred, and a few days before death there was a spontaneous escape of cerebro-spinal fluid, followed in a short time by an escape of pus. The mass diminished in size, and the child became feverish and more restless. Death, preceded for a few hours by convulsions, occurred seven weeks after birth.

We are indebted to Dr. P. E. Loder for the removal of the specimen.

This, as presented, consists of the lower four lumbar vertebræ and the upper two sacral vertebræ. Only the two lower lumbar and the sacral vertebræ are defective. From the appearance of the two upper sacral vertebræ it seems probable that the rest of the sacral canal was also incomplete. The deficiency is due to the non-approximation of imperfectly-developed laminae, and the absence of the spinous processes. The tumor is continuous, by means of a constricted portion, with the contents of the spinal canal. It consists of the arachnoid and dura mater, with the overlying integument. The cord itself is continuous into the tumor, and terminates by union with the integumentary covering. A circular area, of a color deeper than that of the surrounding skin, marks the spot of union between the cord and the integument. The sac contained a small amount of pus. Through the upper anterior sacral foramina can be seen passing the first anterior sacral nerves.

(To be continued.)

REVIEWS AND BOOK NOTICES.

DISEASES OF THE NERVOUS SYSTEM. By JULIUS ALTHAUS, M.D. Putnam & Sons, New York, 1878.

This book is one which is somewhat difficult to characterize. It is very incomplete, and based upon a grossly absurd classification, but so far as it reaches it is very pleasant reading, fairly abreast with the foremost science of the day, careful in its statements, fresh in both manner and matter, evidently the work of one who has read deeply, observed widely, and thought independently. Without entering upon a detailed discussion of the classification,—for said classification is not worthy of detailed discussion,—it may be premised that the system is not pathological, physiological, clinical, or therapeutical in its basis; but simply registral, being the one adopted by the Registrar-General of England. In it diseases of the nervous system

are arranged as convulsions, apoplexy, paralysis, cephalitis, epilepsy, hysteria, and catalepsy, insanity, delirium tremens, tetanus, chorea, and "other structural diseases of the nervous system;" myelitis, acute and chronic, ending in softening, is a form of cephalitis; chronic myelitis, ending in hardening, *i.e.*, sclerotic myelitis, and also syphilitic myelitis, are varieties of "other structural diseases of the nervous system;" all convulsions are either infantile eclampsia, puerperal eclampsia, or eclampsia from poisoning; drunkenness and sunstroke are an apoplexy; aphasia is a paralysis, etc., etc. On the whole, the classification may be designated as "delirious."

The most striking and interesting feature of the book is the discussion, which runs through it, of the asserted increase of nervous diseases in modern times. The sentences of Dr. Althaus are a most welcome and much-needed relief from the dreary generalities—from the building of towers of Babel out of the rotten straw of imperfect, incomplete, and insufficient statistics—which have been so frequently the handiwork of orators and essayists upon this subject. By a careful and many-sided examination of the enormous statistics accumulated by the Registrar-General, he seems to demonstrate that nervous diseases are not more frequent, at least in proportion to other diseases, than formerly. In these discussions it must be borne in mind that all chronic diseases are seen more frequently by physicians than in the days of our fathers, because life is more prolonged and thereby affords more opportunity of acquiring non-fatal chronic disease, and also, when the disease is acquired, of consulting divers doctors in hope of a cure.

In conclusion, we would say that the practitioner using this book, after having acquired a fair knowledge of nervous diseases, will be pleased and instructed by it, whilst to the student it will bring confusion rather than clearness, and will act as a barrier rather than as an aid to the acquisition of knowledge.

THE ACTION OF MEDICINES. By DR. ISAAC OTT. Lindsay & Blakiston, Philadelphia.

To the inhabitants of the earth, nothing seems so opposed to daily experience as the fact demonstrated by science that the earth is whirling through space with a prodigious fury of motion. To the sailor on the ocean, swept along by the Gulf Stream, or perhaps carried by some unknown current to destruction, nothing is so intangible and remains so unsuspected as the steady floating onward. Thus also is it with the great tides of scientific thought: by virtue of their very grandeur they are often unnoted. The universal movement is, perhaps, absolutely unfelt because it is universal, and rarely is it fully appreciated until the historian, looking backward, sees how it has carried onward human progress.

In the history of medicine we conceive that the present decade will be marked as that of the rise of physiological therapeutics, the period when the dignity, the greatness, the truth of the modern therapeutic idea first moved upon the face of the waters, and said, "Let there be light," and the light streamed in and grew,—grew on until the tides moved forward under its influence.

The volume before us is one of the evidences of the drift of professional thought. Four or five years ago, scarcely a book in any language boldly and decisively took ground for the new faith, which was mentioned only to be derided in our most esteemed works on therapeutics. Now almost monthly some new volume appears as an exponent of the system, and is bought up with astonishing rapidity by the practitioners, the rank and file of the profession; whilst in laboratories and in hospitals hundreds of men are adopting, sifting, proving, pushing forward into new regions of discovery.

Dr. Ott's work is chiefly valuable as a guide to those who desire to join in the work of discovery. It is divided into four chapters. The first three of these are upon the methods of studying the physiological action of remedies,—the first the general physiological action, the second the action on the nervous system, the third that on the circulation. The last chapter of the book is upon the action of medicines. We wish this had been omitted. As it is beyond the general scope of the work, it is necessarily too brief to be of much value, and is almost all of it to be found in the later works on therapeutics. The first three chapters are very good, and show that their author is thoroughly conversant with the methods he speaks of: in a word, they are worthy of Dr. Ott's growing reputation as a physiological investigator. We can recommend this book most decidedly as a *sine qua non* to students and practitioners with some leisure,—to any and all desiring to labor in this most promising field of research. Good as the book is, we sincerely hope that in a future edition its author will render it more valuable by omitting accounts of individual doings and filling out the schema of methods by discussing the modes of studying elimination, action on the blood, on the glandular system, on temperature, on cell-growth, etc., etc. Then the work will be complete and exhaustive of its kind,—an absolute guide up to the borders of the unknown in all the methods of investigation in scientific therapeutics.

THE SPAS OF AIX-LES-BAINS AND MARLIOZ. By FRANCIS BENTON, M.D. London, J. A. Churchill, 1877.

This duodecimo of one hundred and fifty-nine pages is from the pen of the resident physician of Aix-les-Bains, and, of course, represents everything *couleur de rose*. It would seem, however, that there can be no question

as to the value of the treatment at Aix of gouty and allied diseases. As a means of information in regard to the value of these springs, the mode of life at them, the expenses, the pleasure-trips, etc., the book seems to have the value of a well-planned, well-written, and fairly reliable advertisement.

GLEANINGS FROM EXCHANGES.

SPINA BIFIDA (?) CURE.—Dr. Norman Teal reports (*Detroit Medical Journal*, December, 1877) the case of a strong healthy child who at birth had a fleshy fluctuating tumor situated at the juncture of the lumbar and sacral divisions, of about the size and shape of a medium hen's egg, with the longest diameter running parallel to the body. Pressure upon it caused the fluid within to recede, evidently into the spinal canal. It was connected with the body by a pedicle some three-fourths of an inch in diameter and rather less than a quarter of an inch in height.

Three months subsequently, the tumor having greatly enlarged, and its contents become more fluid, treatment was commenced. The fluid in it was squeezed forcibly into the spine, a cord was drawn loosely around the pedicle, and iodine applied externally. A few days subsequently, several drachms of fluid were drawn off by the hypodermic syringe, half a drachm of a diluted tincture of iodine injected, and external pressure applied by means of adhesive straps. Under this treatment the tumor became a hard solid lump, which has remained *in statu quo*, the child being now four years old.

OVARIOTOMY DURING PERITONITIS.—Dr. Lawson Tait reports (*Medical Examiner*, November 29) four cases of ovariectomy performed during the existence of peritonitis. In the first case the abdomen was found to contain much ascitic fluid, with flakes of lymph. The surface of the tumor was covered with patches of inflammation and purulent lymph, and finally a quantity of purulent lymph was removed with much care from both pelvic and peritoneal cavity. After the operation the fever abated, and on the ninth day the stitches were removed. In three weeks walking exercise was commenced, and now recovery is complete. In the second case death occurred the sixth day after the operation, from a recurrence of the inflammation. In the third case a large quantity of flaky purulent fluid was found in the abdominal cavity, and the tumor was bound down all round by soft recent inflammatory adhesions. The second day after the operation the temperature had fallen from 38.6° to 37.2°, but subsequently it rose again. By a liberal use of opium the threatening relapse was averted, and the later progress of the patient was steadily towards health. The fourth case was

complicated with violent hemorrhage during the operation, from old adhesion, requiring the free use of the cautery. Death from exhaustion and shock was for some hours momentarily expected. Nevertheless, under the administration of opium (in drachm doses every two hours for some time) convalescence was established.

ANTISEPTIC TREATMENT OF WOUNDS.—In a long and elaborate paper, Dr. Robert F. Weir enthusiastically commends and corroborates the method of Lister, reporting twenty-four surgical cases of various character treated by him in this way. He appends the following mortality table which he has compiled:

		From Ordinary Treatment.	From Open Treatment.	From Modified Antiseptic Treatment.	From Strict Antiseptic Treatment.
Amputations	{ Thigh Leg Arm Forearm }	per ct. 21.4* 28.0†	26.4‡	2.27¶ 9.80**	3.09§§ 10.91
Compound Fractures	{ Thigh Leg Arm Forearm }	per ct. 38.00†	25.4	2.50††	0.00¶¶

SKIM MILK IN DIABETES.—Dr. H. W. Jones reports (*Chicago Medical Journal and Examiner*, January, p. 31) a case of saccharine diabetes cured by observing the following directions: (1) To take *no other food* than skim-milk; for the first day or two (2) to drink but *four or five pints* in all, distributing this amount at intervals of two hours; after the third day (3) add a pint or two of the same preparation *curded with rennet*, but not to exceed seven pints, including curd.

HERPES ZOSTER PRODUCED BY PRESSURE ON THE NERVES.—Mr. L. H. Jones reports (*British Medical Journal*, December 1) two cases of herpes zoster in which he believes the eruption was caused by pressure on intercostal nerves.

In the first case a prominence was found on the rib (sixth), evidently indicating a node. The patient was put on iodide of potassium, with perchloride of mercury and bark. When he next presented himself, there were copious and distinct crops of vesicles, showing clearly the course of the affected intercostal nerve. The eruption continued for some time; but, by persevering with the medicine, the prominence on the rib melted away, and with that the herpes also.

The second case was a laboring-man who was suffering great pain in the bend of the

* "St. Bartholomew's Hospital Report," *loc. cit.*

† Spence's "Surgery."

‡ Callender, Spence, and Holmes.

§ Volkmann and Lister.

¶ Krönlein.

† Krönlein.

‡ Volkmann.

§ Lucæ, quoted by Volkmann.

¶ Callender.

¶ Volkmann.

knee. Hot fomentations were ordered, and an opiate at night. Two days afterwards there appeared copious and distinct crops of vesicles along the outer half of the calf of the leg, two large crops on the outer side of the tendo Achillis, and two small bunches,—one on the little toe, the other on the outside of the next toe,—indicating the course of the external saphenous nerve. The bend of the knee appeared hard and brawny, without any pulsation. Judging it to be an abscess, a deep incision was made, and a large amount of pus evacuated. The herpes immediately disappeared.

RADICAL CURE OF HYDROCELE.—Mr. Geo. Brown (*London Lancet*, December 1, 1877) claims the following advantages for the seton over incision in the radical cure of hydrocele: 1. The operation is much simpler and less painful. 2. It is unattended by loss of blood or shock to the system. 3. There is less risk of suppuration or sloughing. 4. After-treatment is more simple. 5. The cure is effected more speedily. 6. No cicatrix remains. 7. An anæsthetic is unnecessary in the case of adults.

MISCELLANY.

CHANGES IN THE PANCREAS IN DIABETES.—In a communication to the Academy of Medicine, Paris, says *La Presse Médicale*, Dr. Lancereaux has made some important observations, which, if confirmed, may throw some light upon the pathology of this obscure disease. "Diabetes mellitus," he remarks, "is in some cases accompanied by grave alterations in the pancreas. Under these circumstances the progress of the disease is rapid, attended by the usual symptoms of the disease in their most aggravated form, and followed by a fatal result. Animals which have had their pancreas extirpated have a voracious appetite, rapidly emaciate, and quickly die. Taking these facts into consideration, there is," in the opinion of Dr. Lancereaux, "evidently a causal relation between alterations in the pancreas and the production of the disease."

COST OF THE GERMAN UNIVERSITIES.—The twenty universities of Northern Germany cost the country annually about two millions of dollars. The University of Leipsic alone receives \$250,000. These twenty universities have a staff of 1250 professors, who receive salaries varying from \$500 to \$3000. The young man who embraces the career of teaching can calculate on having a salary of \$2000 when he reaches the age of thirty-five. He is certain also of a pension when retired. Germany has a university for every two millions of inhabitants, Austria one for five millions, England one for seven millions, and Switzerland one for one million.

TO REMOVE MOLES.—"A member" gives the following method in the *British Medical*

Journal. He removes the mole by two curved incisions, passing on each side. The edges of the wound are then brought together by means of a wire serre-fine, and the wound and teeth of the serre-fine covered with lint soaked in collodion. On the third day he removes the serre-fine, and seals up the openings thus left in his dressing with more collodion. On the fifth or sixth day he removes the lint and finds the wound healed. "Usually there is no mark left, and in most cases only the faintest possible line of a cicatrix."

HYDROPHOBIA DURING PREGNANCY.—The following case has been communicated to the Academy of Medicine of Paris by Professor Borley, for M. Congier, of Bagnières. A woman, aged 42 years, when about eight months pregnant, was bitten on the hand by a cat. She was confined in due course. About six weeks after, and ninety days after the bite, the lochial discharge became altered. Shortly, marked symptoms of hydrophobia set in, and the woman died in five days. The child was healthy.—*The Doctor*.

DEATHS from wild animals are said to be increasing in India. According to the official report of the Government, no less than 19,273 persons died within the year, in India, from the attacks of such animals, while 54,830 cattle were killed by the same means. The official reports also state that the recent great cyclone on the Bengal coast cost 165,000 lives per million of those who inhabited the district over which it extended.

BILLROTH AND VOLKMANN.—The completion of Billroth's tenth year of professorship in Vienna was recently celebrated by a festival, at which at least fifteen hundred students were present. Professor Volkmann, of Halle, was also honored last month with a numerously attended festival, in celebration of his refusal to quit the scene of his labors for the chair of surgery offered to him in the University of Würzburg.

MR. GEORGE DARWIN, after searching investigation, concludes that "the widely different habits of life of men and women in civilized nations, especially among the upper classes, tend to counterbalance any evil from marriage between healthy closely-related persons." Mr. Darwin's views are in a measure sustained by Dr. Vorn's inquiry into the commune of Batz. Batz is a rocky, secluded, ocean-washed peninsula of the Loire Inférieure, France, containing over three thousand people of simple habits who don't drink and commit no crime. For generations they have intermarried, but no cases have occurred of deaf-mutism, albinism, blindness, or malformation, and the number of children born is above the average.

THE incompressibility of sand is mentioned in the *Journal of Industry* as a cheap and ready means of making supporting columns and bases for anvils, or for blocks designed to support heavy weights. Sand, enclosed in

thin wooden or iron walls, if thoroughly shaken down, may be made to sustain a much greater weight than the walls or cylinders alone, by placing all the weight directly on the sand and quite free from the walls that retain it. Wooden boxes filled with sand thus make excellent supports for anvils or tables for laboratory work. So long as the pressure is vertical, the sand will sustain far greater weights and resist heavier blows than could be borne by solid blocks of wood of the same size.

It gives us pleasure to call attention to the improvements being made by Dr. Given at *Burn Brae*. They are evidences of deserved prosperity. The doctor has recently completed an annex to the female department, and in the spring will complete one to the male department, thus greatly enlarging and increasing the facilities for the accommodation of patients.

INFLATION OF THE URETHRA, either by injecting a solution of carbonate of sodium, followed by one of tartaric acid, or else by means of a Politzer's bag, has been successfully used as an aid to catheterism in urethral stricture.

THE best local anæsthetic for dental operations is said to be the extract of eucalyptus. Apply one drop on cotton to the sensitive dentine just before excavating.—*Boston Medical and Surgical Journal*.

COHNHEIM and Birch-Hirschfeld are both mentioned in connection with the chair of pathological anatomy in Leipsic, and it is rumored that the faculty mean to offer it to Von Recklinghausen, who probably will decline it. Volkmann, of Halle, has declined a call to Würzburg.

TO CLEAN PAINT.—Take one ounce pulverized borax, one pound small pieces best brown soap, and three quarts water; let simmer till the soap is dissolved, stirring frequently. Do not let it boil. Use with a piece of old flannel, and rinse off as soon as the paint is clean. This mixture is also good for washing clothes.

DR. BIGELOW reports in *The Practitioner* a case of tetanus caused by a rusty nail in the foot, which was relieved in less than thirty minutes by introducing a drachm of chloral hydrate into the wound after it had been enlarged by incision.

THE Edinburgh University has this winter 2252 students, divided as follows: faculty of medicine, 922; of arts, 919; of law, 347; of divinity, 64.

THE Germans propose to lengthen their already comparatively long period of study for a medical diploma. *Deutsche Med. Wochenschrift*, Nos. 46 and 47, 1877.

SULPHATE OF CINCHONIDIA has been tested as an antiperiodic and tonic in the Hartford City Hospital with very satisfactory results.

THE death of Dr. Austin L. Sands, of Newport, Rhode Island, is announced.

NOTES AND QUERIES.

NASAL DIPHTHERIA.

SAN BUENA VENTURA, December 23, 1877.

H. C. WOOD, JR., M.D.:

DEAR DOCTOR,—During the recent epidemic of diphtheria in this place, my partner, Dr. C. L. Bard, and myself, had four cases of nasal diphtheria, only one of which I wish to report in full. Of the other three, two of them died of paralysis of the heart, one in fifteen days and the other in twenty-six days after the attack. The other died of inanition twenty-five days after the attack. The fourth case was that of a boy of fifteen years of age, and not at all robust. His attack was very severe, at least as bad as any case I have ever seen. He was compelled to keep his mouth open in order to breathe, as the membrane almost occluded his nasal passages. He was treated in the same manner as the others,—namely, his throat was cauterized with nitrate of silver at the beginning of the attack, and afterwards with Monsel's Solution and glycerin in equal proportions. He used a gargle, composed of tincture of myrrh, carbolic acid, acetic acid, and honey, several times a day, and a tonic composed of tincture of the chloride of iron and sulphate of quinia.

His disease left him at the end of the twenty-eighth day completely prostrated, with semi-paralysis of the muscles of deglutition and phonation, and partial amaurosis. His legs and arms were almost completely paralyzed. His former treatment was stopped; and he was put upon the use of iron and strychnine, and a Gaiffe's interrupted battery was used for twenty minutes to half an hour daily, and this treatment has been kept up until the present time. The results have been most satisfactory. His paralyses have all entirely disappeared, with the exception of the paralysis of his lower extremities, and that has so far improved that he is able to walk with very little difficulty. He has grown very much, and looks better and weighs more than before his attack.

I think it is a question of a very short time before he will be as well or better than he was last August when he was first attacked.

I cannot too strongly insist upon the use of nitrate of silver (pure) in preference to a weaker caustic in the first stages of this disease. As cases of nasal diphtheria seldom, if ever, recover, I thought that this case might be of interest to the profession.

Yours very truly,

J. CRAIG MILLER, M.D.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U. S. ARMY FROM DECEMBER 30, 1877, TO JANUARY 12, 1878.

MURRAY, R., COLONEL AND SURGEON.—Announced as Medical Director of the Division. G. O. 1, Division of the Missouri, January 2, 1878.

ALEXANDER, R. H., MAJOR AND SURGEON.—Granted leave of absence for four months from January 1, 1878. S. O. 1, A. G. O., January 2, 1878.

STORROW, S. A., MAJOR AND SURGEON.—Assigned to duty at Fort Laramie, Wy. T. S. O. 1, Department of the Platte, January 2, 1878.

WATERS, W. E., CAPTAIN AND ASSISTANT-SURGEON.—To return to San Antonio, Texas, and report in person to the Commanding-General, Department of Texas, for assignment. S. O. 4, A. G. O., January 4, 1878.

CARVALLO, C., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for one month, with permission to apply for ten days' extension. S. O. 1, Department of the Missouri, January 2, 1878.

ELBREV, F. W., CAPTAIN AND ASSISTANT-SURGEON.—Assigned to duty at Oglethorpe Barracks, Savannah, Ga. S. O. 203, Department of the South, December 27, 1877.

PAULDING, H. O., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Granted leave of absence for one month, with permission to apply for three months' extension. S. O. 1, Department of Dakota, January 2, 1878.

FINLEY, J. A., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Leave of absence extended two months. S. O. 5, A. G. O., January 5, 1878.

NEWLANDS, W. L., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Assigned to temporary duty at Angel Island, Cal. S. O. 1, Division of the Pacific and Department of California, January 2, 1878.

BUCHANAN, W. F., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence until April 1, 1878; and his resignation accepted by the President, to take effect April 1, 1878. S. O. 2, A. G. O., January 3, 1878.